

FACT SHEET



BMDO FACT SHEET JN-00-05

NATIONAL MISSILE DEFENSE PROGRAM

Introduction

"....we are affirming that there is a threat, and the threat is growing, and that we expect it will soon pose a danger not only to our troops overseas but also to Americans here at home.... On August 31st, North Korean launched a Taepo Dong 1 missile.... The Taepo Dong 1 test was another strong indicator that the United States in fact will face a rogue nation missile threat to our homeland against which we will have to protect the American people."

—William S. Cohen, Secretary of Defense, January 20, 1999

"The primary mission of the NMD system being developed is the defense of the U.S.—all 50 states—against a limited strategic ballistic missile attack such as could be posed by a rogue nation. Such a system also would provide some capability against a small accidental or unauthorized launch of strategic ballistic missiles from more nuclear-capable states."

—William S. Cohen, Secretary of Defense, February 2, 1999

The U.S. traditionally has relied on the wide expanses of the Atlantic and Pacific oceans to keep our homeland at arms length from the turmoil of global conflict. However, the proliferation of long range ballistic missiles and weapons of mass

Early Warning Satellite Military Satellite Communications Upgrade Early Warning Radars & Adjunct Forward Based Radars Command, Control, and Communications **Ground Based Radar Site** Ground Based Interceptor In Flight Interceptor **Communications System** Early Warning National Missile Satellite Defense Architecture

destruction to third world countries may negate much of this advantage and possibly deliver a serious blow to the national security of the United States.

PROLIFERATION

At present, only a few countries possess missiles that can strike the U.S., but the possibility that this number will increase cannot be ignored. Today, technology is spreading around the world at an astonishing rate, including technology dealing with ballistic missile development and, more ominously, with weapons of mass destruction.

Complementing this growing technological capability is the continuing intent among some regimes to harm the international system, particularly the U.S. and its allies. Furthermore, it is impossible to predict whether traditional notions of deterrence will operate under future conditions.

NMD Mission

The Ballistic Missile Defense Organization (BMDO) has balanced technological development, affordability, the potential threat, international treaty considerations and competing national defense priorities to establish the National Missile Defense (NMD) program. BMDO established an NMD Joint Program Office (JPO) to manage the multiple-Service components of the NMD system and oversee their integration into an effective architecture.

The NMD program is a Major Defense Acquisition Program designed to develop and deploy an NMD system. Expected Initial Operational Capability (IOC) is in 2005. The decision to deploy

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the NMD system will be taken at a Deployment Readiness Review in 2000. The initial deployment, Capability 1 (C1) will be limited to 20 missiles. Increasingly capable deployment options after C1 will add further capability to the NMD system.

If deployment is required, the NMD system could protect the U.S. against limited attack by long range missiles. However, it would not be capable of repelling massed attacks or attacks by short range missiles.

Development of an NMD system may reduce the strategic value of long range ballistic missiles before they become commonly viewed as an essential component of international power and prestige and thereby present a strong incentive against these missiles.

NMD System

Although no deployment has been authorized, the NMD Deployment Readiness Program is completing technology development and initial system integration with the goal of maturing the key components enough to field as a system. The key NMD components include a ground based interceptor (GBI), an X-band radar (XBR), Upgraded Early Warning Radars (UEWR), Battle Management/Command, Control, and Communications (BM/C3) and space sensor technology.

The GBI program is developing, demonstrating and validating the technology and components for a state-of-the-art, cost-effective, lightweight, nonnuclear, hit-to-kill missile to intercept and destroy intercontinental ballistic missiles targeted against the United States. Developing the GBI is the highest priority in the NMD program. This program consists of two efforts: the Kill Vehicle (KV) and the booster. The KV efforts are currently concentrating on the technical issues of the interceptor seeker.

The NMD XBR is designed to provide target tracking and discrimination. Currently, NMD program developers are constructing a testbed radar to resolve several technical issues and to participate in the system testing.

Upgrades to America's Early Warning Radar network will provide the existing forward-based attack warning system the capability to augment the operation of a NMD system. These radars can be modified quickly and with a cost that is significantly less than the cost of building new radars.

The BM/C3 project is focused on integrating the NMD interceptor and sensor operations in support of informed decision making. Currently, TRW is building the BM/C3 element to develop the best NMD command, control and communications architecture for the entire NMD system.

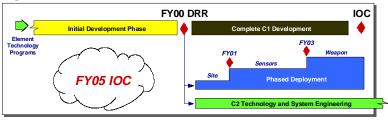
On 1 May 1998, BMDO awarded Boeing the contract to perform the responsibilities as the Lead System Integrator. Boeing's role will be that of the NMD Program "prime" contractor which will require them to integrate the development of the element programs into a system and successfully execute a test program leading to an integrated system test (IST) prior to the Deployment Readiness Review in Summer 2000. Under government oversight, Boeing will integrate the Raytheon kill vehicle into an off the shelf booster stack which was selected earlier this year. Boeing will also develop alternative architectures that could be deployed to counter a wide spectrum of potential threats.

Other components vital to NMD are the multiple components of the Space Based Infrared System. Although not funded by BMDO, these systems play critical roles in theater and national missile defense by providing surveillance, warning, and track data to overall missile defense operations.

PROGRAM SCHEDULE

Currently, flight tests are being conducted at the Kwajalein Missile Range in the Pacific Ocean. First, the elements will be tested individually, and then eventually as a system. If successful, these tests will indicate that an effective and affordable NMD system can be built if so directed. The program has already conducted two successful sensor tests and one successful "hit to kill" intercept test. The NMD Program is scheduled to conduct two more intercept tests prior to the Deployment Readiness Review, scheduled for Summer 2000.

NMD Program



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